EDSD 2013-2014
Warsaw School of Economics

Course curriculum for EDSD Population Data and Summary Measures

1. General information
1. Name: Population Data and Summary Measures
2. Level: Doctoral level
3. ECTS Credit points: 7.5

2. Course placement within the educational system
1. Subject: Demography
2. This is a doctoral level course and is mandatory in the Master programme in Demography.
3. The course is offered in English.

3. Learning outcomes
On a general level the student shall acquire practical knowledge of the use and calculation of summary measures using various data sources. Specifically students will be able to:
- individually discuss and calculate basic summary measures
- link fertility and mortality laws to population dynamics
- use multistate life tables, compare standardization methods
- understand the methods used in working with incomplete data
- work on building and using consistent time series
- use heterogeneous information in a consistent way
- understand and discuss qualitative approach in demography

4. Course content
The course is divided into five modules:
Basic Summary Measures
The most often used basic summary measures are described, as well as their strengths and shortcomings. The implicit hypotheses behind the calculations are made explicit. The following concepts and tools are presented and discussed: crude rates, age-specific rates, summary indices based on rates of the 1st kind or the 2nd kind, net and gross probabilities, population change during one year and reproduction from one generation to the next, life table indexes, multiple-decrement life table, multistate life tables, methods of standardization, heterogeneity of populations, period and cohort summary indexes, compositional and tempo effects in period measures.
Working with Incomplete or Inaccurate Data
In many countries fully developed administrative systems are lacking and thus accuracy of reporting and classification of demographic events cannot be assumed. During the last 50 years indirect estimation techniques have been developed to overcome such limitations and to provide adequate measures of demographic processes in situations in which direct measures were too inaccurate to be informative. The methods can be divided into two broad groups. One group uses consistency checks between different measures of the same underlying phenomenon to explore likely accuracy, and then applies simple models of data errors to arrive at plausible corrections ("semi-direct methods"). The second group uses robust indicators of an underlying phenomenon, even though the indicator may be affected by other factors ("indirect methods"). Over the course of three sessions, for both semi-direct and indirect methods, one example for estimating adult mortality is presented in detail.
Causes of death: collection, classification, analysis
This module is begins with a history of the collection and classification of causes of death, and then moves on to discuss the current systems in use today. Problems related to choice of the

cause of death, axes of classification, problems of comparability in time and space are discussed. The topics are illustrated through discussion of various real-world situations.

Data collection and sources of demographic data

This module deals with sources of demographic data such as censuses and registers, illustrating the importance of administrative records in secondary analysis. The module then moves on to demographic and social surveys, from questionnaire construction, through data reliability issues, and on to analysis. The module concludes with a discussion of data comparability and the harmonization of various data sources.

Qualitative Methods

This module addresses both theoretical and practical aspects of the qualitative approach. It covers following topics: Limits of quantitative data, Qualitative concepts, Methods of qualitative data collection, Analysis of qualitative data, Integration of qualitative and quantitative research.

5. Teaching and assessment

The course is designed as a series of lectures and seminars. Grading is based on individual performance, via written assignments, oral presentation as well as group activities.

The University views plagiarism very seriously, and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

6. Grading scale

Grading on the programme is based upon the ECTS scale. This means that in order to pass a certain course or assignment a student has to get the mark A, B, C, D or E, where A is the highest possible mark. Students who fail an assignment will get the mark F. In very general terms, the different grades represent the following quality of work:

A	Excellent	The achievement clearly distinguishes itself and is excellent with regards to theoretical depth, practical relevance, analytical ability and independent thought.
B	Very good	Very good. The work shows a very good ability of theoretical depth, practical application, analytical skill and independent thought.
C	Good	The achievement lives up to expectations and is of a good standard when considering theoretical depth, practical relevance, analytical ability and independent thought.
D	Satisfactory	The result is satisfactory on most levels, but has some weaknesses with regards to the above mentioned aspects.
E	Sufficient	The performance satisfies the minimum requirements, but not more.
F	Fail	The result is not satisfactory enough.

7. Prerequisites

General prerequisites for the Master programme in Demography

8. Literature

See separate document